

REMARKS

The present Response is submitted in response to the Examiner's Final Office Action mailed November 6, 2002. Claims 1-18 and 25-40 remain pending.

Reconsideration of the application is respectfully requested in view of the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

1. Rejection Under 35 U.S.C. §103

The Examiner rejects claims 1-18 and 25-40 under 35 U.S.C. § 103 as being unpatentable over *Widlicka, et al.* (United States Patent No. 5,604,784) in view of *Kurtz* (United States Patent No. 2,986,533). Applicants respectfully traverse this rejection.

A) No Motivation to Combine

Applicants object to the Examiner's combination of the *Widlicka* and *Kurtz* references because there is no motivation to combine the references in the manner suggested by the Examiner.

The prior art must teach or suggest making a modification to the prior art in order to render a claimed invention obvious. *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In other words, one must be **motivated** by the prior art to make the modification necessary to arrive at the present invention. *In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1991). Absent such motivation, a rejection based on a combination of references is unsupported and any rejection based on such a combination must be withdrawn.

In the Office Action, the Examiner alleges that in light of the teachings of *Kurtz*, and based on the well-known combination of metallic components for forming shielding in an x-ray system, it would have been obvious to modify *Widlicka* to include a first and second powder metal. However, a close reading of each of these references demonstrates that one of skill in the art would in fact not be motivated by the references to make the modifications necessary to arrive at the present invention. In fact, any combination of these references to arrive at the presently claimed invention would involve the use of impermissible hindsight.

To begin, *Widlicka* merely teaches that "granulated bismuth" can be mixed with a liquid carrier, and the mixture can then be applied – as a liquid – to the surface of an object so as to provide a desired amount of radiation attenuation. As acknowledged by the Examiner, nowhere does *Widlicka* teach that any additional powder metal be used in conjunction with the granulated bismuth. Indeed, *Widlicka* goes so far as to acknowledge that another granulated material – lead – would not be conducive to providing a desirable solution, nor does *Widlicka* even suggest that it be used in combination with granulated bismuth. Thus, taken as a whole, *Widlicka* tends to teach away from the notion of using additional powder metal(s), as is presently claimed.

Moreover, there is nothing present in the teachings of *Kurtz* that would motivate one of skill in the art to utilize multiple powder metal components in the manner presently claimed. Again, as acknowledged by the Examiner, *Kurtz* discloses the use of a single powder metal, "granulated tungsten powder." *Kurtz* teaches that the granulated tungsten powder be combined with an aqueous solution of lead, tin, copper and nickel to form a radiation attenuated material. In this regard, the Examiner asserts that while *Kurtz* fails to specifically disclose a second powder, "it is well-known in the art and would have been obvious to an artisan to realize that the solution of lead, tin, copper and nickel can be formed from metal powders." However, even

assuming that lead, tin, copper and nickel can be formed as metal powders, this approach is in fact not what is taught or even suggested by *Kurtz*. *Kurtz* specifically teaches that the granulated tungsten powder must be treated by placing the powder in an aqueous solution containing decomposable salts of lead, tin, copper and nickel (col. 2, lines 5-10). *Kurtz* emphasizes the need for an aqueous solution because, after mixing with the granulated tungsten powder, “[t]he solution is then evaporated and upon evaporation particles of all the medical salts present are deposited as a coating on the tungsten particles.” (col. 2, lines 10-14, *emphasis added*). Thus, *Kurtz* teaches that the single metal powder (Tungsten) must be mixed with a aqueous solution, so that the Tungsten particles can be coated by removing the solution with evaporation. Nowhere does *Kurtz* teach, imply or suggest that the lead, tin, copper, nickel mixture be provided in powder form and, indeed, if it were provided in that form, the requisite coating of the Tungsten would not occur. Said differently, if the lead, tin, copper, nickel mixture were provided in powder form as suggested by the Examiner, there is no way that the evaporation step would occur so as to result in a coating on the tungsten particles. Thus, *Kurtz* teaches away from the teachings now urged by the Examiner.

Consequently, there is absolutely nothing contained in the teachings of the *Widlicka* reference or the *Kurtz* reference that would suggest the use of the combination of multiple powder metals, as is specifically required by the present pending claims. Moreover, there is absolutely nothing about the two references such that one of skill in the art would be motivated to make the modification necessary to arrive at the present invention. As such, Applicants respectfully request that the present obviousness rejection be withdrawn with respect to all of the pending claims.

CONCLUSION

In light of the arguments set forth above, Applicants earnestly believe that they are entitled to a letters patent, and respectfully solicit the Examiner to expedite prosecution of this patent application to issuance. Should the Examiner have any questions, the Examiner is encouraged to telephone the undersigned.

Respectfully submitted,

Date: May 5, 2003

By: E.L. Maschoff

ERIC L. MASCHOFF
Registration No. 36,596

WORKMAN, NYDEGGER & SEELEY
60 East South Temple
1000 Eagle Gate Tower
Salt Lake City, UT 84111
(801) 533-9800

W:\14374\3\k900000002056V001.doc